

Force HW

1. If you increase the force acting on an object (assume mass stays the same), what will happen to the acceleration?
2. If you increase the mass of an object (assume force stays the same), what will happen to the acceleration?
3. If you apply a 30 N force to a 2.2 kg object, what is the acceleration of that object?
4. If you apply a 27 N force to an object and it accelerates 4.5 m/s^2 , what is the mass of the object?

5. If you push an object with a mass of 12 kg and it accelerates 2.0 m/s^2 , what is the force of the push?

6. If you apply a force of 5.5 N to an object and it accelerates 1.2 m/s^2 , what is the mass of that object?

7. If you pull an object with a mass of 48 kg and it accelerates 5.9 m/s^2 , what is the force of the pull?

8. If you apply a 200 N force to an object with a mass of 85 kg, what is the acceleration of that object?

9. Describe Newton's 1st Law of Motion and provide an example of this law.

10. Describe Newton's 3rd Law of Motion and provide an example of this law.